Reply to Office Action of January 12, 2005 and further to the Advisory Actions mailed April 26, 2005

and May 26, 2005

#### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A coated material, having a surface comprising a silane-based coating solution comprising, as the main component, a compound represented by formula 1 applied to a fiber material and hardened/solidified by the action of a catalyst, wherein said coating solution comprises:

(a) a compound represented by formula 1

$$R_{1}O = \begin{bmatrix} R_{4} \\ S_{1} \\ OR_{2} \end{bmatrix}_{n} R_{3}$$
 (1)

wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  may be same or different and each is hydrogen or an alkyl group having 1-4 carbons and n = 2-10; and

(b) a compound represented by formula 3 having two hydrolyzable substituents and two unhydrolyzable substituents

$$\begin{array}{c|c}
R_{12} \\
 & \\
R_{9}O \longrightarrow Si \longrightarrow OR_{11} \\
 & \\
R_{10}
\end{array}$$
(3)

wherein  $R_9$  and  $R_{11}$  may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of  $R_9O$  and  $R_{11}O$  to Si is an oligomer comprising a siloxane bond; and  $R_{10}$  and  $R_{12}$  each is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule,

wherein the compound of formula 3 is added to the coating solution in an amount not exceeding 50% of the amount of formula 1 present in said coating solution;

wherein the surface is formed where a hydrolyzable organometallic compound is used as a catalyst for hardening/solidifying said coating solution of a silane type; and

wherein the surface is formed where one or more organometallic compounds selected from the group consisting of titanium, zirconium, aluminum and tin is/are used as said hydrolyzable organometallic compound.

2. (Previously Presented) The coated material according to claim 1, wherein the surface is formed where, prior to the application of the coating solution, said fiber material is dipped in alcohol and dried and ultraviolet ray is further irradiated thereto.

#### 3. - 4. (Canceled)

5. (Previously Presented) The coated material according to claim 1, wherein the surface is formed where, in addition to formula 1, a coating solution containing a compound represented by formula 2 having three hydrolyzable substituents and one unhydrolyzable substituent is used as the coating solution of a silane type

$$\begin{array}{c}
R_8 \\
\downarrow \\
R_5O \longrightarrow Si \longrightarrow OR_7 \\
\downarrow \\
OR_6
\end{array} (2)$$

wherein R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of R<sub>5</sub>O, R<sub>6</sub>O and R<sub>7</sub>O to Si is an oligomer comprising a siloxane bond; and R<sub>8</sub> is an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule, and

wherein the compound of formula 2 is added to the coating solution in an amount not exceeding 50% of the amount of formula 1 present in said coating solution.

- 6. (Canceled)
- 7. (Currently Amended) The A coated material according to claim 1, wherein the surface is formed where, in addition to formula 1, a coating solution containing, having a surface comprising a silane-based coating solution applied to a fiber material and hardened/solidified by the action of a catalyst,

wherein said coating solution comprises:

(a) a compound represented by formula 1

$$R_{1}O \begin{bmatrix} R_{4} \\ S_{1} \\ OR_{2} \end{bmatrix}_{n} R_{3}$$
 (1)

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> may be same or different and each is hydrogen or an alkyl group having 1-4 carbons and n = 2-10;

(b) a compound represented by formula 2

$$R_5O \longrightarrow Si \longrightarrow OR_7$$
 (2)  
 $OR_6$  ; and

(c) a compound represented by formula 3 is used as the said coating solution of a silane type

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wherein in formulae (2) and (3) R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of R<sub>5</sub>O, R<sub>6</sub>O and R<sub>7</sub>O to Si is an oligomer comprising a siloxane bond; and R<sub>8</sub> is an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule; and wherein R<sub>9</sub> and R<sub>11</sub> may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of R<sub>9</sub>O and R<sub>11</sub>O to Si is an oligomer comprising a siloxane bond; and R<sub>10</sub> and R<sub>12</sub> each is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule, and

wherein the compounds of formula 2 and formula 3 are added to the coating solution in an amount such that the total amount of formula 2 and formula 3 does not exceed 50% of the amount of formula 1 present in said coating solution;

wherein the surface is formed where a hydrolyzable organometallic compound is used as a catalyst for hardening/solidifying said coating solution; and

wherein the surface is formed where one or more organometallic compounds selected from the group consisting of titanium, zirconium, aluminum and tin is/are used as said hydrolyzable organometallic compound.

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- 8. (Currently Amended) A coating solution of a silane type for giving an appropriate strength and good light transmitting and water repelling properties to a fiber material where said coating solution comprises
- (a) a compound represented by above formula 1, as the main component, and a catalyst for hardening/solidifying thereof

wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  may be same or different and each is hydrogen or an alkyl group having 1-4 carbons and n = 2-10;

(b) a compound represented by formula 3 having two hydrolyzable substituents and two unhydrolyzable substituents

$$R_{9}O \xrightarrow{R_{12}} Si \xrightarrow{OR_{11}} (3)$$

$$R_{10}$$

wherein R<sub>9</sub> and R<sub>11</sub> may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of R<sub>9</sub>O and R<sub>11</sub>O to Si is an oligomer comprising a siloxane bond; and R<sub>10</sub> and R<sub>12</sub> each is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule, wherein the compound of formula 3 is added to the coating solution in an amount not exceeding 50% of the amount of formula 1 present in said coating solution; and

(c) a catalyst for hardening/solidifying thereof,

wherein the catalyst for hardening/solidifying the coating solution of a silane type is one or more organometallic compounds selected from the group consisting of titanium, zirconium, aluminum and tin.

$$9. - 10.$$
 (Canceled)

11. (Previously Presented) The coating solution of claim 8, wherein the coating solution of a silane type contains a compound represented by formula 2 having three hydrolyzable substituents and one unhydrolyzable substituent in addition to the compound of formula 1

$$\begin{array}{c|c}
R_8 \\
 \\
R_5O \longrightarrow Si \longrightarrow OR_7 \\
 \\
OR_6
\end{array} (2)$$

wherein R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of R<sub>5</sub>O, R<sub>6</sub>O and R<sub>7</sub>O to Si is an oligomer comprising a siloxane bond; and R<sub>8</sub> is an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule, and

wherein the compound of formula 2 is added to the coating solution in an amount not exceeding 50% of the amount of formula 1 present in said coating solution.

# 12. (Canceled)

13. (Currently Amended) The A coating solution of elaim 8 a silane type for giving an appropriate strength and good light transmitting and water repelling properties to a fiber

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material, wherein the coating solution of a silane type comprises contains a compound represented by formula 2 and a compound represented by formula 3 in addition to the compound of formula 1

### (a) a compound represented by formula 1

$$R_{1}O \begin{bmatrix} R_{4} \\ S_{1} \\ OR_{2} \end{bmatrix}_{n} R_{3}$$
 (1)

wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  may be same or different and each is hydrogen or an alkyl group having 1-4 carbons and n = 2-10;

### (b) a compound represented by formula (2)

$$\begin{array}{c|c}
R_8 \\
R_5O \longrightarrow Si \longrightarrow OR_7 \\
OR_6 \\
\vdots \text{ and }
\end{array}$$

#### (c) a compound represented by formula 3

$$R_{9}O \longrightarrow Si \longrightarrow OR_{11}$$
 (3)

wherein in formulae (2) and (3)  $R_5$ ,  $R_6$  and  $R_7$  may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of  $R_5O$ ,  $R_6O$  and  $R_7O$  to Si is an oligomer comprising a siloxane bond; and  $R_8$  is an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule; and wherein  $R_9$  and  $R_{11}$  may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of  $R_9O$  and  $R_{11}O$  to Si is an oligomer comprising a

siloxane bond; and  $R_{10}$  and  $R_{12}$  each is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule, and

wherein the compounds of formula 2 and formula 3 are added to the coating solution in an amount such that the total amount of formula 2 and formula 3 does not exceed 50% of the amount of formula 1 present in said coating solution.

wherein the catalyst for hardening/solidifying the coating solution of a silane type is one or more organometallic compounds selected from the group consisting of titanium, zirconium, aluminum and tin.

14. (New) The coated material according to claim 7, wherein the surface is formed where, prior to the application of the coating solution, said fiber material is dipped in alcohol and dried and ultraviolet ray is further irradiated thereto.

## SUPPORT FOR THE AMENDMENTS

Claims 3, 4, 9, and 10 were previously canceled.

Claims 6 and 12 are canceled herein.

Claims 1, 7, 8, and 13 have been amended.

Claim 14 has been added.

Support for the amendment of Claim 1 is provided by previously pending and original Claims 1 and 6. Support for the amendment of Claim 7 is provided by previously pending and original Claims 1 and 7. Support for the amendment of Claim 8 is provided by previously pending and original Claims 8 and 12. Support for the amendment of Claim 13 is provided by previously pending and original Claims 8 and 13. Support for new Claim 14 is provided by previously pending Claims 1 and 2, as well as page 17, line 14 to page 18, line 4.

No new matter has been entered by the present amendment.